EPA Region 5 Records Ctr.



Memorandum

Date: September 18, 1998

To: Division File

From: Lance Range, State Sites Unit, Remedial Project Management Section, Student Intern

Re: 1830900005 -- Vermilion County

Tilton/Tilton Plating

Superfund/Technical Reports

On September 15, 1998 a site inspection was conducted at Tilton Plating. John Sherrill, Greg Dunn, Neelu Reddy, and Lance Range arrived on site at 0830. The day was overcast with occasional sunshine. The temperature was in the 70's and there was a very slight breeze.

When we arrived on site, it was noted that the van that was located on the property had been removed. The area was unkept with grass and weeds growing on the property, as well as trees growing along side the building. There are two ways to enter the building, one is through a regular door and the other is a swinging plywood and board door. On the plywood door was a sign that stated that the building was unsafe by the Village of Tilton. Greg went to the plywood door, pulled it, and it came open. Neelu, Greg, and John entered the building with the correct safety gear. From the door, I could see an old stove, an old car battery, and a bucket filled with an unknown brown/green liquid. The building was in serious decay. The ceiling was falling in places, the roof had noticeable holes which would allow rain water in and light could be seen through the cracks in the concrete block walls. Inside the building was a small store room to the south. Inside this small store room were the following items: zinc cyanide, potassium cyanide in a 1500 gram jar, copper sulfate in 4 containers containing 2,745 grams per jar, ammonium hydroxide, an unlabeled powder in a small container, unlabeled liquid in 2 small containers, Sol. N75 in small brown bottles, and 3 glass jars of N28 solution. These items were found west of the small store room: iron phosphate in a 5 gallon container, andic stripper in 7 polydrums each containing 55 gallons, NOCO1000, a small container of zinc cyanide, small can of paint, 5 gallons of unknown corrosive material, and an unknown type of oil. At the furthest point west, at the back wall these items were discovered: 50 gallon vat with about 2 inches of green liquid (copper written on the side of vat) there is bluish green staining on the floor here, 50 gallon vat of dark green material (looks like glue), and a 50 gallon vat with a dry white crystalline substance. Coming east in the building these items were observed: 30 gallon trough with a sludge type material, 50 gallon vat with what appears to be 1 foot of water, 50 gallon vat with 3 inches of water with sand at the bottom, 55 gallon drum with maybe water, 55 gallon drum 3/4 full could be water, salvage drum (unknown content), chromic acid in a 10 gallon pail, 50 gallon vat empty, 50 gallon vat with 15 inches of a brown liquid material, 1 gallon jug 1/2 full of phosphoric acid

(no lid), 5 gallon pail of oily looking substance, 20 gallon container looks like water (container says black ink), 100 gallon vat full of maybe water (crystals seen growing on the side), 5 gallon bucket 1/2 water 1/2 very hard solid material, and a 30 gallon vat with white powder filling about 2/3 of the vat with water on top (water is within 1 inch of the top). At the east end of the building a 5 gallon bucket of oil, paint remover, 12 gallon garbage can of boric acid, and a car battery.

To the west of the small store room, a floor drain is located in the floor. The opening is about 9 inches. There is sediment located inside the drain. A second drain was located at the southwest side. This drain has a diameter of only 2-3 inches.

Greg, Neelu, and John then exited the building and we began our walk around the building. We passed a rusted out 55 gallon drum. At the northwest corner of the building was a concrete pad with assorted metal motors, 2 blowers, about 9 old vats, assorted metal junk and debris. A water meter cover was discovered on the pad. At the north part of the pad was 9 55 gallon drums. These drums appeared to be empty. A small shed is located at the north end of the pad. Outside this shed were five 5 gallon buckets with crystals on the top were the caps are located. Also was a pail that says chromic acid, but could be water. There was also 55 gallon drums with the following substances: hydrochloric acid, sulfuric acid, formaldehyde, phosphoric acid (25 gallon), and muriatic acid. There were 2 25 gallon containers wrapped in wooden stakes. The contents are unknown. 1 blue 25 gallon this container is 1/2 full and the contents could be an oil/antifreeze mixture. Map of area is attached.

Behind the shed was a 20 gallon container contents unknown and a 55 gallon steel drum. To the west of the shed is 9 55 gallon drums (8 poly, 1 steel) covered by brush and honeysuckle vines.

On our way back to the front of the building John and I noticed the gas line entering the building. The valve appears to be shut off. Natural gas company may need to be called.

Neelu found that we did not have the glass tubes needed for sampling, so she called Kent Johnson to bring them from the regional office.

At 1000 we began to make a grid at the back of the building. We started at the northwest corner and placed the first row of flags 1 foot away from the building and every 5 feet along the edge of the building. The second row of flags were placed 3 feet from the building and 5 feet along the edge of the building. More grid was placed on the slop behind the building because runoff has occurred and contamination was found on the hillside. Map attached to show grid. At each flag, an X-ray florescence machine (XRF) was used to determine the concentration of metals in the soil. The XRF was operated by Greg Dunn who has been trained to operate the machine.

At 1005, John and I began to take a few pictures of the site. At 1005, picture 1 was taken looking northwest at the entire facility. At 1006, pictures 2 and 3 were taken looking at the entire site from the southwest. At 1009, pictures 4 and 5 were taken of the small shed and miscellaneous junk located north of the main building. At 1010, picture 6 was taken looking at the drums located on the concrete pad at the northwest corner of the main building. At 1012,

pictures 7 and 8 were taken of the inside of the building as seen from the doorway. At 1014, picture 9 was taken at the back of the building looking north. And at 1017, picture 10 was taken looking east at the building from the bottom of the embankment.

John and I flagged the front of the building. Since a concrete slab is located at the front of the building, our flags were positioned 6 feet from the building starting from the northeast corner and continuing along the east edge of the building every 5 feet until we stopped at 15 feet. The second row was placed ten feet from the northeast corner and along the east edge of the building every 5 feet until 15 feet was reached. Our third and final row was placed 15 feet from the northeast corner of the building and along the east edge of the building every 5 feet until 15 feet was reached. Map attached

The front of the building has a driveway of rocks of assorted sizes and asphalt which hindered our completion of the grid.

At 1045, Kent Johnson arrived on site with the sampling glass tubes. John showed Kent the site and explained what we had found. Kent departed the site at 1115.

Greg finished the XRF from the back of the building and began to take readings from each flag from the grid in the front. Once this was completed, Greg took two additional readings from the edge of the concrete located in front of the metal door. These were readings 103 and 104. Greg and I then went to the rear of the building and took 3 additional samples. Map attached.

At 1120, inorganic cooler 1 was opened. Neelu collected soil sample X101 from sample location A, which is located 6 feet east of the southeast corner of the building at 1130. Soil sample X104 was taken from inside the building at the 9 inch diameter drain at 1140. Soil sample X102 was taken at 1155 from sample location L, which is located 15 feet north of the southeast corner of the building. At 1158, soil sample X105 was taken from location O, which is located on the east side of the building near the metal door Soil sample X103 was taken at 1201 from location 28, which is 25 feet north and 30 feet west of the southwest corner of the building (towards the railroad). Soil sample X106 was taken at 1205 at sample location 25, which is located 1 foot west of the northwest corner of the building. Soil sample X107 was taken at 1210 at location 14, which is 25 feet north and 20 feet west of the southeast corner of the building. Soil sample X108 was taken at 1212 from location 7, which is 1 foot west and 15 feet north of the southeast corner of the building. This cooler 1 was then sealed at 1215.

Greg and Neelu donned the level B protective gear to collect the rest of the samples.

Organics cooler 2 was opened at 1220. At 1240, sample X201 was collected from a 50 gallon vat located at the back of the building along the west wall. The contents of the vat were blue in color. At 1255, sample X202 was collected from a 50 gallon vat at the west end of the building. The contents of the vat were green in color. At 1315, sample X204 was collected from a 50 gallon vat located on the west back wall of the building. The contents of the vat were orange/brown in color. At 1340, sample X204 was collected from a 50 gallon vat at the west end of the building. The contents of the vat were brown in color and around the outside of the vat

were crystals. Organics cooler 2 was sealed at 1345.

Inorganic cooler 3 was opened at 1225. At 1240, sample X201 was collected from a 50 gallon vat located at the back of the building along the west wall. The contents of the vat were blue in color. At 1255, sample X202 was collected from a 50 gallon vat at the west end of the building. The contents of the vat were green in color. At 1315, sample X204 was collected from a 50 gallon vat located on the west back wall of the building. The contents of the vat were orange/brown in color. At 1340, sample X204 was collected from a 50 gallon vat at the west end of the building. The contents of the vat were brown in color and around the outside of the vat were crystals. At 1400, sample X205 was collected from a 25 gallon drum wrapped in wooden boards. This drum was located north of the building on the concrete pad. The container contained a screw type lid that was surrounded by white crystals. The substance extracted for sample was clear and a slippery feel to it. Inorganic cooler 3 was sealed at 1400.

Organic cooler 4 was opened at 1340. At 1400, sample X205 was collected from a 25 gallon drum wrapped in wooden boards. This drum was located north of the building on the concrete pad. The container contained a screw type lid that was surrounded by white crystals. The substance extracted for sample was clear and a slippery feel to it. At 1400, sample X301 was collected from the same point as X201, as a duplicate. At 1410, sample X303 was collected from the same vat as X203, as a duplicate. At 1420, sample X304 was collected from the same vat as X204, as a duplicate. At 1455, sample X206 was collected from a 35 gallon fiber drum in semi-poor condition. The material extracted accidentally spilled onto the labels of the samples. This made the numbers on the labels almost impossible to read. The numbers on the volatile sample jars were 9800408991 and 9800408990. Crganic cooler 4 was sealed at 1510.

Inorganic cooler 5 was opened at 1430. At 1455, sample X206 was collected from a 35 gallon fiber drum in semi-poor condition. The material extracted accidentally spilled onto the labels of the samples. This made the numbers on the labels almost impossible to read. The numbers on the volatile sample jars were 9800408991 and 9800408990. Inorganic cooler 5 was scaled at 1520.

After the completion of the samples, Greg nailed the plywood door shut to ensure no one could enter the building. 5 minutes later it was realized that the spray paint was left inside the building. Greg went to the metal door and found it to be unlocked. Greg retrieved the paint and locked the metal door on the way out. All of the garbage and used paper towels and gloves were deposited in a trash bag and disposed of. We left the site at 1530.

The inorganic coolers were loaded and delivered to the Champaign lab at 1630. The organic coolers were delivered to the Springfield lab at 1030 on the following day. It should be emphasized that the coolers never left IEPA possession.

Attachments cc: Neelu Reddy